

SEQUENCE LISTING

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Duan, Rui-Dong
Nilsson, Ake

<120> Human Alkaline Sphingomyelinase and Use Thereof

<130> ALBI 41348

<140> PCT/SE04/00628

<141> 2004-04-23

<150> US 60/320,139

<151> 2003-04-24

<150> US 60/481,598

<151> 2003-11-05

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<170> PatentIn version 3.4

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<212> PRT

<213> Homo sapiens

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35 40 45

Val Asp Thr Pro Asn Leu Asp Ala Met Ala Arg Asp Gly Val Lys Ala
50 55 60

Arg Tyr Met Thr Pro Ala Phe Val Thr Met Thr Ser Pro Cys His Phe
65 70 75 80

Thr Leu Val Thr Gly Lys Tyr Ile Glu Asn His Gly Val Val His Asn
85 90 95

Met Tyr Tyr Asn Thr Thr Ser Lys Val Lys Leu Pro Tyr His Ala Thr
100 105 110

Leu Gly Ile Gln Arg Trp Trp Asp Asn Gly Ser Val Pro Ile Trp Ile
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Gly	Ile	Ala	His	Asn 165	Tyr	Lys	Asn	Glu	Thr 170	Glu	Trp	Arg	Ala	Asn 175	Ile
Asp	Thr	Val	Met 180	Ala	Trp	Phe	Thr	Glu 185	Glu	Asp	Leu	Asp	Leu 190	Val	Thr
Leu	Tyr	Phe 195	Gly	Glu	Pro	Asp	Ser 200	Thr	Gly	His	Arg	Tyr 205	Gly	Pro	Glu
Ser	Pro 210	Glu	Arg	Arg	Glu	Met 215	Val	Arg	Gln	Val	Asp 220	Arg	Thr	Val	Gly
Tyr 225	Leu	Arg	Glu	Ser	Ile 230	Ala	Arg	Asn	His	Leu 235	Thr	Asp	Arg	Leu	Asn 240
Leu	Ile	Ile	Thr	Ser 245	Asp	His	Gly	Met	Thr 250	Thr	Val	Asp	Lys	Arg 255	Ala
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Ile	Glu	Phe 275	Glu	Leu	Leu	Asp	Tyr 280	Gly	Pro	Asn	Gly	Met 285	Leu	Leu	Pro
Lys	Glu 290	Gly	Arg	Leu	Glu	Lys 295	Val	Tyr	Asp	Ala	Leu 300	Lys	Asp	Ala	His
Pro 305	Lys	Leu	His	Val	Tyr 310	Lys	Lys	Glu	Ala	Phe 315	Pro	Glu	Ala	Phe	His 320
Tyr	Ala	Asn	Asn	Pro 325	Arg	Val	Thr	Pro	Leu 330	Leu	Met	Tyr	Ser	Asp 335	Leu
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Ala Asn Asp Gly His Leu Ala Thr Leu Leu Pro Met Leu His Thr Glu
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Ser Ala Leu Pro Pro Asp Ala Leu Leu Val Ala Asp Gly Pro Cys Leu
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Pro Thr Pro Ala Trp Leu Leu Trp Cys Trp
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Ala Pro Gly Ala Gly Ala Pro Val Gln Ser Gln Gly Ser Gln Asn Lys
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Leu Leu Leu Val Ser Phe Asp Gly Phe Arg Trp Asn Tyr Asp Gln Asp
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Val Asp Thr Pro Asn Leu Asp Ala Met Ala Arg Asp Gly Val Lys Ala
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Arg Tyr Met Thr Pro Ala Phe Val Thr Met Thr Ser Pro Cys His Phe
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Thr Leu Val Thr Gly Lys Tyr Ile Glu Asn His Gly Val Val His Asn
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Gly	Ile	Ala	His	Asn 165	Tyr	Lys	Asn	Glu	Thr 170	Glu	Trp	Arg	Ala	Asn 175	Ile	
Asp	Thr	Val	Met 180	Ala	Trp	Phe	Thr	Glu 185	Glu	Asp	Leu	Asp	Leu 190	Val	Thr	
Leu	Tyr	Phe 195	Gly	Glu	Pro	Asp	Ser 200	Thr	Gly	His	Arg	Tyr 205	Gly	Pro	Glu	
Ser	Pro 210	Glu	Arg	Arg	Glu	Met 215	Val	Arg	Gln	Val	Asp 220	Arg	Thr	Val	Gly	
Tyr 225	Leu	Arg	Glu	Ser	Ile 230	Ala	Arg	Asn	His	Leu 235	Thr	Asp	Arg	Leu	Asn 240	
Leu	Ile	Ile	Thr	Ser 245	Asp	His	Gly	Met	Thr 250	Thr	Val	Asp	Lys	Arg 255	Ala	
Gly	Asp	Leu	Val 260	Glu	Phe	His	Lys	Phe 265	Pro	Asn	Phe	Thr	Phe 270	Arg	Asp	
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His	Gly	Phe 355	Asp	Asn	Lys	Asp	Met 360	Asp	Met	Lys	Thr	Ile 365	Phe	Arg	Ala	

Val Gly Pro Ser Phe Arg Ala Gly Leu Glu Val Glu Pro Phe Glu Ser
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Val His Val Tyr Glu Leu Met Cys Arg Leu Leu Gly Ile Val Pro Glu
385 390 395 400

Ala Asn Asp Gly His Leu Ala Thr Leu Leu Pro Met Leu His Thr Glu
405 410 415

Ser Ala Leu Pro Pro Asp Gly Arg Pro Thr Leu Leu Pro Lys Gly Arg
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Ala Pro Gly Ala Gly Ala Pro Val Gln Ser Gln Gly Ser Gln Asn Lys
20          25          30
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```
Leu Leu Leu Val Ser Phe Asp Gly Phe Arg Trp Asn Tyr Asp Gln Asp
35          40          45
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```
Val Asp Thr Pro Asn Leu Asp Ala Met Ala Arg Asp Gly Val Lys Ala
50          55          60
```

```
Arg Tyr Met Thr Pro Ala Phe Val Thr Met Thr Ser Pro Cys His Phe
65          70          75          80
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Thr Leu Val Thr Gly Lys Tyr Ile Glu Asn His Gly Val Val His Asn
85          90          95
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Met Tyr Tyr Asn Thr Thr Ser Lys Val Lys Leu Pro Tyr His Ala Thr
100 105 110
Leu Gly Ile Gln Arg Trp Trp Asp Asn Gly Ser Val Pro Ile Trp Ile
115 120 125
Thr Ala Gln Arg Gln Gly Leu Arg Ala Gly Ser Phe Phe Tyr Pro Gly
130 135 140
Gly Asn Val Thr Tyr Gln Gly Val Ala Val Thr Arg Ser Arg Lys Glu
145 150 155 160
Gly Ile Ala His Asn Tyr Lys Asn Glu Thr Glu Trp Arg Ala Asn Ile
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Asp Thr Val Met Ala Trp Phe Thr Glu Glu Asp Leu Asp Leu Val Thr
180 185 190
Leu Tyr Phe Gly Glu Pro Asp Ser Thr Gly His Arg Tyr Gly Pro Glu
195 200 205
Ser Pro Glu Arg Arg Glu Met Val Arg Gln Val Asp Arg Thr Val Gly
210 215 220
Tyr Leu Arg Glu Ser Ile Ala Arg Asn His Leu Thr Asp Arg Leu Asn
225 230 235 240
Leu Ile Ile Thr Ser Asp His Gly Met Thr Thr Val Asp Lys Arg Ala
245 250 255
Gly Asp Leu Val Glu Phe His Lys Phe Pro Asn Phe Thr Phe Arg Asp
260 265 270
Ile Glu Phe Glu Leu Leu Asp Tyr Gly Pro Asn Gly Met Leu Leu Pro
275 280 285
Lys Glu Gly Arg Leu Glu Lys Val Tyr Asp Ala Leu Lys Asp Ala His
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Pro Lys Leu His Val Tyr Lys Lys Glu Ala Phe Pro Glu Ala Phe His
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His Gly Phe Asp Asn Lys Asp Met Asp Met Lys Thr Ile Phe Arg Ala
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Val Gly Pro Ser Phe Arg Ala Gly Leu Glu Val Glu Pro Phe Glu Ser
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